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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,297	10/06/2004	Adrianus Johannes Hendricus Petrus Van Der Pol	NL 020280	6548

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER

WON, BUMSUK

ART UNIT PAPER NUMBER

2879

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/510,297	VAN DER POL ET AL.	
	Examiner	Art Unit	
	Bumsuk Won	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to because in figure 1A, reference number 16 and 17 are not referencing correctly. According to specification, reference number 16 is a transparent layer which is outer layer to luminescent layer, and reference number 17 is a luminescent layer which is inner layer to transparent layer. Appropriate correction is required. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Low-pressure mercury vapor discharge lamp having protective layers.

Claim Objections

Claim 2 is objected to because of the following informalities: Regarding claim 2, the reference number for the further transparent layer is 18 according to the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the alkaline-earth metal". There is insufficient antecedent basis for this limitation in the claim. For examining purpose, it will be assumed that claim 3 is dependent of claim 2.

Claim 4 recites the limitation "the further rare-earth metal". There is insufficient antecedent basis for this limitation in the claim. For examining purpose, it will be assumed that claim 3 is dependent of claim 2.

Claim 5 recites the limitation "the oxide". There is insufficient antecedent basis for this limitation in the claim. For examining purpose, it will be assumed that claim 3 is dependent of claim 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snijkers-Hendrickx (US 2001/0026122) in view of Matsuo (US 5,869,927).

Regarding claim 1, Snijkers-Hendrickx discloses a low-pressure mercury vapor discharge lamp (figure 1A) comprising a discharge vessel (10), the discharge vessel (10) enclosing, in a gastight manner, a discharge space (11) provided with a filling of mercury and a rare gas, the discharge vessel (10) comprising discharge means for maintaining a discharge in the discharge space (11), while a luminescent layer (17) comprising a luminescent material is protected by a transparent layer (16) in a side of the luminescent layer facing the discharge space (11).

Snijkers-Hendrickx does not disclose another transparent layer protecting in a side of luminescent layer facing the inner wall (12) of discharge vessel (10).

Matsuo discloses a protecting layer (figure 1, 4) is provided in a side of luminescent layer (3) facing the inner wall (not referenced) of discharge vessel (2) as well as another protecting layer (5) is provided in a side of luminescent layer facing the discharge space (not referenced), for the purpose of reducing the amount of mercury sealed in the glass bulb of the discharge vessel (abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a two protecting layers provided in both sides of luminescent layer in the discharge vessel disclosed by Matsuo in the low-pressure mercury vapor discharge lamp Snijkers-Hendrickx, for the purpose of reducing the amount of mercury sealed in the glass bulb of the discharge vessel.

Regarding claim 2, Snijkers-Hendrickx discloses the transparent layer comprise a material selected from the group formed by oxides of scandium, yttrium, and a further rare-earth metal (paragraph 7).

Regarding claim 3, Snijkers-Hendrickx discloses the alkaline-earth metal is calcium, strontium, and/or barium (paragraph 13 and claim 3).

Regarding claim 4, Snijkers-Hendrickx discloses the further rare-earth metal is lanthanum, cerium, and/or gadolinium (paragraphs 7 and 13).

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Regarding claim 5, Snijkers-Hendrickx discloses the oxide is yttrium oxide and/or gadolinium oxide (paragraph 7).

Regarding claim 6, Snijkers-Hendrickx discloses the transparent layers have a thickness of between 5 nm and 200 nm (paragraph 26).

Regarding claim 7, Snijkers-Hendrickx discloses the luminescent material comprises a mixture of green-luminescing, terbium-activated cerium-magnesium aluminate, blue-luminescing barium-magnesium aluminate activated by bivalent europium, and red-luminescing yttrium oxide activated by trivalent europium (paragraph 38).

Regarding claim 8, Snijkers-Hendrickx discloses the discharge vessel is made from a glass comprising silicon dioxide and sodium oxide, with a glass composition comprising the following essential constituents, given in percentages by weight: SiO_2 : 60-80% and Na_2O : 10-20% (paragraphs 11-13).

Regarding claim 9, Snijkers-Hendrickx discloses the glass composition includes the following constituents, given in percentages by weight: SiO_2 : 70-75%, Na_2O : 15-18%, and K_2O : 0.25-2% (paragraph 21).

Regarding claim 10, Snijkers-Hendrickx discloses a lamp housing (figure 1A, 70) is attached to the discharge vessel (10) of the low-pressure mercury-vapor discharge lamp, which lamp housing is provided with a lamp cap (71).

Regarding claim 11, Snijkers-Hendrickx discloses the discharge vessel (figure 1A, 10) of the low-pressure mercury-vapor discharge lamp is surrounded by a light-transmitting envelope (60) which is attached to the lamp housing (70).

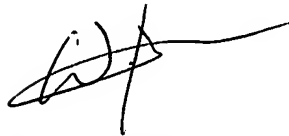
Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bumsuk Won whose telephone number is 571-272-2713. The examiner can normally be reached on Monday through Friday, 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bumsuk Won
Patent Examiner



JOSEPH WILLIAMS
PRIMARY EXAMINER